using the FTP and SFTP procedures of subpart B of this part; or

(B) In lieu of testing vehicles according to the provisions of §86.1829-01(b)(4)(i)(A), a manufacturer may provide a statement in its application for certification that, based on the manufacturer's engineering evaluation of such CST testing as the manufacturer deems appropriate, all light-duty vehicles and light-duty trucks comply with the CST emission standards.

(ii) For light-duty vehicles and light-duty trucks, a manufacturer with a test group that cannot be appropriately tested on all Certification Short Test emission test procedures described in §86.1439 may request an exemption, as described in §86.1427(d), from the inappropriate test(s) for purposes of demonstrating compliance with the Certification Short Test as described in subpart O of this part.

(iii) For light-duty vehicles and light-duty trucks, a manufacturer with a test group that can be appropriately tested on none of the Certification Short Test emission test procedures described in §86.1439 may request an alternative procedure as described in §86.1427(d).

(5) *Idle CO Testing.* To determine idle CO emission compliance for light-duty trucks, the manufacturer shall follow one of the following two procedures:

(i) For test groups containing lightduty trucks, each EDV shall be tested in accordance with the idle CO testing procedures of subpart B of this part; or

- (ii) In lieu of testing light trucks for idle CO emissions, a manufacturer may provide a statement in its application for certification that, based on the manufacturer's engineering evaluation of such idle CO testing as the manufacturer deems appropriate, all light-duty trucks comply with the idle CO emission standards.
- (c) Running change testing. Running change testing shall be conducted as required under the provisions of §86.1842-01.
- (d)(1) Beginning in the 2004 model year, the exhaust emissions must be measured from all LDV/T exhaust emission data vehicles tested in accordance with the federal Highway Fuel Economy Test (HWFET; 40 CFR part 600, subpart B). The oxides of ni-

trogen emissions measured during such tests must be multiplied by the oxides of nitrogen deterioration factor computed in accordance with §86.1823-01 and subsequent model year provisions, and then rounded and compared with the applicable emission standard in §86.1811-04. All data obtained from the testing required under this paragraph (d) must be reported in accordance with the procedures for reporting other exhaust emission data required under this subpart.

- (2) In the event that one or more emission data vehicles fail the applicable HWFET standard in §86.1811-04, the manufacturer may submit to the Administrator engineering data or other evidence showing that the system is capable of complying with the standard. If the Administrator finds, on the basis of an engineering evaluation, that the system can comply with the HWFET standard, he or she may accept the information supplied by the manufacturer in lieu of the test data.
- (3) The provisions of paragraphs (d)(1) and (d)(2) of this section do not apply to MDPVs.

[64 FR 23925, May 4, 1999, as amended at 65 FR 6864, Feb. 10, 2000]

## § 86.1830-01 Acceptance of vehicles for emission testing.

- (a) General test vehicle requirements. (1) All test vehicles shall be tested in the proper configurations as specified in §§ 86.1822-01, 86.1828-01, or 86.1842-01, as applicable for the type of test conducted.
- (2) Components affecting emissions which are used to build test vehicles shall either be randomly selected production parts or parts verified to be in the middle 50 percent of the tolerance range. The manufacturer will determine which components affect emissions using good engineering judgment.
- (3) Test vehicles must have air conditioning installed and operational if that configuration is available with air conditioning. Optional equipment must be installed or represented on test vehicles according to the provisions of §86.1832–01.
- (4) Test vehicles must receive proper scheduled maintenance as established by the manufacturer according to the

provisions of §86.1834–01(b) or (c). Unscheduled maintenance must be approved under the provisions of §86.1834–01(d).

(5) Vehicle mileage shall be accumulated in accordance with §86.1831-01.

- (6) The road load forces and equivalent test weight used during testing will be determined according to the provisions of §86.129-00.
- (7) Test vehicles shall have the appropriate emission testing hardware installed (e.g., exhaust pipe testing flange, fuel tank drain, access ports to evaporative canisters, and fuel tank heat blanket) and shall have tires with appropriate tire wear.
- (b) Special provisions for durability data vehicles. (1) For DDV's, the mileage at all test points shall be within 250 miles of the scheduled mileage point as required under §86.1823–01(b). Manufacturers may exceed the 250 mile upper limit if there are logistical reasons for the deviation and the manufacturer determines that the deviation will not affect the representativeness of the durability demonstration.
- (2) For DDV's, except as allowed under the bench testing provisions of  $\S 86.1823-01$ , all emission-related hardware and software must be installed and operational during all mileage accumulation after the 5000-mile test point.
- (3) DDV's may be reconfigured before the 5000-mile test point providing that the representativeness of the emission results will not be affected. Manufacturers shall use good engineering judgment in making such determinations.
- (c) Special provisions for emission data vehicles. (1) All EDV's shall have at least the minimum number of miles accumulated to achieve stabilized emission results according to the provisions of §86.1831–01(c)(4).
- (2) Within a durability group, the manufacturer may alter any emission data vehicle (or other vehicles such as current or previous model year emission data vehicles, running change vehicles, fuel economy data vehicles, and development vehicles) in lieu of building a new test vehicle providing that the modification will not impact the representativeness of the vehicle's test results. Manufacturers shall use good engineering judgment in making such

determinations. Development vehicles which were used to develop the calibration selected for emission data testing may not be used as the EDV for that configuration. Vehicles from outside the durability group may be altered with advance approval of the Administrator.

(3) Components used to reconfigure EDV's under the provisions of paragraph (c)(2) of this section shall be appropriately aged if necessary to achieve representative emission results. Manufacturers shall determine the need for component aging and the type and amount of aging required using good engineering judgment.

(4) Bench-aged hardware may be installed on an EDV for emission testing as a method of determining certification levels (projected emission levels at full or intermediate useful life) using bench aging procedures approved under the provisions of §86.1823–01.

## §86.1831-01 Mileage accumulation requirements for test vehicles.

- (a) *Durability Data Vehicles.* (1) The manufacturer shall accumulate mileage on DDV's using the procedures which have been approved under the provisions of §86.1823–01(a)(1).
- (2) All tests required by this subpart on durability data vehicles shall be conducted within 250 miles of each of the nominal test point mileage. This ±250 mile test point mileage tolerance may be modified with the advance approval of the Administrator if the basis for the written request is to prevent an interruption of durability mileage accumulation due to test scheduling conflicts for weekends, holidays, or other similar circumstances.
- (b) Emission data vehicles and running change vehicles. (1) The standard method of service accumulation for emission data vehicles and running change vehicles shall be mileage accumulation using the Durability Driving Schedule as specified in Appendix IV to this part.
- (2) The manufacturer may use an alternative mileage accumulation method providing the form and extent of the service accumulation represents normal driving patterns for that vehicle, the method is consistent with good engineering judgment, and the method is